yumeng ma

MASTER'S STUDENT · HUMAN-COMPUTER INTERACTION

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Education

Brown University *Providence, RI*
SC.M IN COMPUTER SCIENCE *2022 - Present*
  GPA: 4.0 / 4.0
  Coursework: UI/UX, Designing Humanity Centered Technology, HCI Seminar, Collaborative Robotics, Computer Graphics

Arizona State University *Tempe, AZ*
B.S. IN COMPUTER SCIENCE AND PSYCHOLOGY *2019 - 2022*
  Barrett Honors College
  GPA: 4.0 / 4.0
  Summa Cum Laude
  Thesis: "Assessing Exhibit Interaction through Bridging the Connections Between Biometrics and Traditional Tools"

Publications

* denotes equal contribution

CONFERENCE PROCEEDINGS

Zainab Iftikhar, **Yumeng Ma**, and Jeff Huang. 2023. "Together but not together": Evaluating Typing Indicators for Interaction-Rich Communication. In Proceedings of the 2023 Conference on Human Factors in Computing Systems (CHI '23). *DOI*

Ian Gonsher, **Yumeng Ma**, Ivan Pineda-Dominguez, Matthew Lee, and Yuxin. 2023. The Mixed Reality Passthrough Window: Rethinking the Laptop Videoconferencing Experience. Human Interaction and Emerging Technologies (IHIET-AI 2023): Artificial Intelligence and Future Applications. *DOI*

Ian Gonsher, Mandy He, Kevin Hsu, Leon Lau, Arun Kavishwar, Jinha Kang, Maya Fleischer, Li June Choi, Vanessa Chang, Asad Khan, Ray Sun, Sicheng Li, **Yumeng Ma**, Michael Chandler, and Keyu Zhu. 2023. Integrating Interfaces into Furniture: New Paradigms for Ubiquitous Computing, Mixed Reality, and Telepresence within the Built Environment In Proceedings of the 6th Conference on Media Architecture Biennale. (MAB '23). (to appear)

EXTENDED ABSTRACTS

Yumeng Ma* and Jiahao Ren*. 2023. ProactiveAgent: Personalized Context-Aware Reminder System. In The 36th Annual ACM Symposium on User Interface Software and Technology (UIST '23 Adjunct). *DOI*

Research Experience

Brown University Department of Neuroscience (Paradiso Lab) *Providence, RI*
GRADUATE RESEARCHER *2023 - Present*
- Building a visual prosthesis software to help blind and visually impaired users locate and find everyday objects.

Brown University (Sonification Project for NASA) *Providence, RI*
RESEARCH ASSISTANT *2023 - Present*
- Collaborating with scientists from the Smithsonian Observatory and NASA to develop a sound and haptic enabled space visualization cross platform mobile app for visually impaired individuals.

Brown University (Mixed Reality Window Project) *Providence, RI*
DESIGN RESEARCHER *2022 - Present*
- Introducing a new paradigm for the integration of AR into laptop and desktop displays, enabling local users to interact more easily and seamlessly with remote users during videoconferencing sessions.

University of California Los Angeles (HCI Lab) *Los Angeles CA*
RESEARCH INTERN *2023*
- Leveraged LLMs and personal agents to create a proactive reminder and suggestion app by taking in user context, history, and spoken interactions.

Brown University (Robotic Arm Manipulation) *Providence, RI*
STUDENT RESEARCHER *2023*
- Performed and tested text-driven robot grasp tasks with CLIP-feature field in NeRF.

Brown University (HCI Lab) *Providence, RI*
DISTRIBUTED RESEARCH EXPERIENCES FOR UNDERGRADUATES *2022*
- Designed novel typing indicators and found that they enhance user co-presence in written communication through in depth surveys and interviews.

Arizona State University Department of Psychology (SoLET Lab) *Tempe, AZ*
RESEARCH ASSISTANT *2022*
- Conducted testing and evaluation of tutoring systems to optimize learning and educational practices for underrepresented groups.

NASA Psyche Mission *Tempe, AZ*
COLLABORATOR *2021-2022*
- Developed a web app that enabled users to interact with the Psyche Spacecraft model and conducted user studies with bio-metric data analysis, revealing that the app increased public engagement.

Industry Experience

Civilience *Remote*
PRODUCT MANAGER & UI/UX DESIGN INTERN | LIAISON BETWEEN FRONTEND AND UIUX *2023 - Present*
- Leading the UI/UX team to design a web-based app with interactive health data visualizations and create reusable components for the design system to maintain consistency throughout the product.

Clocky *Remote*
SOFTWARE DEVELOPER INTERN *2023*
- Developed a new version of clocky.com using Shopify's Liquid language.

Awards, Fellowships, & Grants

2023 **Tapia Celebration of Diversity in Computing Conference Scholarship**, Brown University
2019 - 2023 **Microsoft DisAbility Scholarship**, Microsoft
2022 **Google CS Research Mentorship Program (CSRMP) Fellowship**, Google
2022 **Virtual Grace Hopper Celebration (GHC) Scholarship**, AccessComputig

Teaching Experience

Spring '22 **Information Assurance**, TA for Adam Doupe and Tiffany Bao, Arizona State University

Extracurricular & Work Activities

2022 - Present **Master's Representative**, Brown University CS Diversity Committee *Providence, RI*
2021 - Present **Member**, AccessComputing
2023 **Student Volunteer**, UIST *San Francisco, CA*
2020 - 2021 **Microsoft Support / Xbox Advocate Contract**, Microsoft *Tempe, AZ*

Skills

Programming	Python, C/C++, C#, Java, Unix/Linux, ROS
Web	HTML, CSS, Javascript, Typescript, React, Vue, APIs, Git
Game Dev	Unity, Godot, OpenGL
Data	Jupyter Notebook, MySQL, MATLAB
Design	UI/UX, Adobe Creative Suite, Figma, Wireframing, Fusion360, Blender
Hardware	Arduino, Rasberry Pi